



State of Utah
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

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March 4, 1997

Steve Lackey
Kennecott Barney's Canyon Mining Company
P.O. Box 311
Bingham Canyon, Utah 84006

Re: Review of Plan Amendment, Kennecott Barney's Canyon Mining Company, Barney's Canyon Mine, M/035/009, Salt Lake County, Utah

Dear Mr. Lackey:

The Division has completed a review of your Amended Notice of Intention for the Barney's Canyon Mine, located in Salt Lake County, Utah. Information which has been reviewed by the Division includes: a three-ring volume of NOI changes received October 4, 1996, and a second three-ring volume of NOI changes received February 14, 1997. The February 14, 1997, volume contains new information in response to technical comments raised by the Division in a January 14, 1997, facsimile to Kennecott.

The Division has determined the proposed changes described by these submissions to be categorized as an amendment to the approved NOI. After reviewing these submissions, the Division has several comments which will need to be addressed before approval may be granted. The comments are listed separately under the applicable Minerals Rule heading. Please format your response in a similar fashion. The Division sent a draft version of these comments to Kennecott via facsimile on February 26, 1997, to expedite the review process.

The Division will suspend further review of the Barneys Canyon NOI Amendment until your response to this letter is received. If you have any questions in this regard please contact me at 538-5286 or Tony Gallegos at 538-5267. Thank you for your patience and cooperation in completing this permitting action.

Sincerely,

D. Wayne Hedberg
Permit Supervisor
Minerals Regulatory Program

jb
Attachment: Review
cc: Kiran Bhayani, DWQ w/attachment
Minerals Staff (route)
o:\review\m35-09.rvw

DOGM REVIEW COMMENTS
BARNEYS CANYON MINE AMENDMENT M/035/009
EAST BARNEYS PIT PROJECT

last revision 3/4/97

R647-4-105 - Maps, Drawings & Photographs

105.1 Topographic base map, boundaries, pre-act disturbance

Please revise the names/labels on Plate 96-3 Barneys Canyon Mine Site Permit Boundary to be consistent with the names used in the Disturbed Area Summary Table or revise the table accordingly. (AAG)

R647-4-106 - Operation Plan

106.2 Type of operations conducted, mining method, processing etc.

Please provide a general overview of each of the new activities or new disturbances associated with this proposed amendment. Please describe the reasons for modifying the disturbed area borders to include new areas as shown in this submission. Please describe the proposed changes to the mine operations which are included in this amendment, but are not reflected by the addition of a new disturbed area (the addition of a new process pond is one example). (AAG)

106.3 Estimated acreages disturbed, reclaimed, annually.

Table 3.11-1 Disturbed Area Summary includes several new names under the main disturbance categories which differ from the names used in the previous Table 3.11-1. Acreage totals in this amended version of Table 3.11-1 for various categories (Pits, Roads, Admin/Process/Shop, Topsoil Storage, Waste Dumps and Leach Pads) differ from total acreages in the previous Table 3.11-1. Please explain the correlation between the new location names and acreages and the old names and acreages, or revise the table accordingly. (AAG)

The category of Leach Pads in table 3.11-1 totals 212 acres. Page 62 of the submission describes the amount of leach pad area required for the life of the project as 170 acres. Please explain this discrepancy and modify the text as appropriate. (AAG)

106.4 Nature of materials mined, waste and estimated tonnages

Page 70 of this amendment submission identifies the East Barney's Pit waste rock as having a pH of 9.3 and an acid base potential of +12.5 ton/K-ton. How many waste rock samples from the East Barney's Pit area were analyzed? Were the samples composites? Were other analyses such as Total Metals and EP Toxicity performed on any of these samples from the East Barneys Pit area? If so, please provide the results of those tests. (AAG)

R647-4-110 - Reclamation Plan

110.2 Roads, highwalls, slopes, drainages, pits, etc., reclaimed

Page 59 of the submission describes the proposed pit wall slopes in the East Barneys Pit as averaging 47 degrees on the north wall and 37-39 degrees on the south wall. Bench face angles are expected to be 64 degrees in bedrock and 45 degrees in alluvium. Please provide this type of information in a highwall variance request in the appropriate variance section of the submission. Variances previously granted for other pit highwalls at the site are not automatically extended to new pits. (AAG)

R647-4-111 - Reclamation Practices

111.6 All slopes regraded to stable configuration

The Division applauds the efforts made by Kennecott Barneys Canyon to utilize wasterock for backfilling of open pits. The proposed use of waste rock from the East Barneys Pit as backfill for the Barneys Canyon Pit is another commendable effort. (AAG)

111.7 Highwalls stabilized at 45 degrees or less

See pit highwall comments under section R647-4-110 - Reclamation Plan. (AAG)

R647-4-112 - Variance

See variance comments in section R647-4-110.2. (AAG)

R647-4-113 - Surety

The amount of reclamation surety proposed for the amended Barneys Canyon Mine (\$3.64 M) is less than the surety amount currently posted. The reduction in the topsoil depth from 12 inches to 6 inches is the main reason for the significant decrease in the estimated reclamation costs. It appears that reclamation costs for the third process pond were not included in the recent revision to the reclamation estimate. Please provide an estimate of the costs to reclaim the third process water pond. It is unlikely that the cost for reclamation of this will significantly affect the surety amount to warrant an increase in the \$4.6 M surety currently posted.

A reduction in the amount of reclamation surety currently posted will require approval from the Board of Oil, Gas and Mining. Telephone conversations with Barneys Canyon personnel indicate that a reduction in the amount of reclamation surety currently posted is not requested at this time. Please confirm this. (AAG)